

Disclosed in the present application are a crystallization method of N-[N-(3,3-dimethylbutyl)-L- $\alpha$ -aspartyl]-L-phenylalanine methyl ester crystals excellent in stability, which comprises using water alone or a mixture of water and a lower alcohol as the crystallization solvent and maintaining the nucleation temperature at 30°C or greater, as well as a crystallization method of N-[N-(3,3-dimethylbutyl)-L- $\alpha$ -aspartyl]-L-phenylalanine methyl ester crystals excellent in stability, which comprises using water alone or a mixture of water and a lower alcohol as the crystallization solvent and using, as the seed crystals, N-[N-(3,3-dimethylbutyl)-L- $\alpha$ -aspartyl]-L-phenylalanine methyl ester crystals exhibiting the specific peaks of diffracted X-rays at angles of diffraction ( $2\theta$ , CuK $\alpha$  rays) of at least 6.0°, 24.8°, 8.2° and 16.5°, whereby the same type of crystals as the seed crystals are allowed to be preferentially precipitated, in accordance with which crystallization methods highly stable N-(3,3-dimethylbutyl)-APM crystals can be obtained stably and inexpensively..